

(19)



Europäisches Patentamt

European Patent Office

Office européen des brevets



(11)

EP 1 587 156 A1

(12)

EUROPEAN PATENT APPLICATION

published in accordance with Art. 158(3) EPC

(43) Date of publication:

19.10.2005 Bulletin 2005/42

(51) Int Cl.⁷: **H01M 4/58**

(21) Application number: **03782865.4**

(86) International application number:

PCT/JP2003/016416

(22) Date of filing: **22.12.2003**

(87) International publication number:

WO 2004/064180 (29.07.2004 Gazette 2004/31)

(84) Designated Contracting States:

**AT BE BG CH CY CZ DE DK EE ES FI FR GB GR
HU IE IT LI LU MC NL PT RO SE SI SK TR**

(72) Inventors:

- **KAJIYA, Yoshio, c/o Petoca Materials Ltd.**
Kashima-gun, Ibaraki 314-0198 (JP)
- **TASAKI, Hiroshi, c/o Petoca Materials Ltd**
Kashima-gun, Ibaraki 314-0198 (JP)

(30) Priority: **08.01.2003 JP 2003001955**

(71) Applicant: **Nikko Materials Co., Ltd.**

Tokyo 105-8407 (JP)

(74) Representative: **Goddard, Heinz J.**

**Forrester & Boehmert
Pettenkoferstrasse 20-22
80336 München (DE)**

(54) **MATERIAL FOR POSITIVE ELECTRODE OF LITHIUM SECONDARY BATTERY AND PROCESS FOR PRODUCING THE SAME**

(57) Stable supply of a cathode material for a lithium secondary battery that excels in sinterability and composition stability and can exhibit satisfactory battery performance is accomplished by reducing to 100 ppm or less both the contents of Na and S being impurity ele-

ments in multiple oxides as materials for a cathode material for a lithium secondary battery and carbonic salts as precursor materials for the production of a cathode material for a lithium secondary battery.

EP 1 587 156 A1